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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,718	01/06/2004	Chun-Chang Lai	AOIP0011USA	1717
27765	7590	02/08/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			BUI, HUNG S	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/707,718	LAI ET AL.	
	Examiner	Art Unit	
	Hung S. Bui	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the motherboard case comprising a plurality of connectors as described in the specification. Applicant appears to claim the motherboard cage having a plurality of holes/apertures. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 8-14 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Rolls et al. [US 6,750,562].

Regarding claim 1, Rolls et al. disclose a computer system (figures 3-4), comprising:

- a housing (figures 3-4);
- a motherboard (40) installed inside the housing, the motherboard comprising:
- a top surface (a downward direction of the surface from the motherboard shown in figures 3-4);
- a bottom surface (an upward direction of the surface from the motherboard shown in figures 3-4);
- a central processing unit (42) installed on the bottom for the processing data;
- a case (72) installed on a region inside of the housing and adjacent to the top surface (figures 3-4) of the motherboard; and
- at least an integrated device electronics device (74) installed inside the case.

Regarding claim 2, Rolls et al. further disclose a first heat ventilating device (68) installed on a region inside of the housing and adjacent to the bottom surface of the motherboard for ventilating heat generated by the central processing unit to a region outside of the housing.

Regarding claim 3, Rolls et al. disclose wherein the first heat ventilating device is a pipeline cooler (figures 3-4 have shown a pipeline cooler by a rectangular pipebox adjacent to the fan 68).

Regarding claim 4, Rolls et al. disclose at least a first heat ventilating hole (63) installed on the housing and adjacent to the bottom surface of the motherboard, the first heat ventilating device ventilating heat generated by the central processing unit through the first heat ventilating hole and to a region outside of the housing (figures 3-4).

Regarding claims 8-9, Rolls et al. further disclose at least a memory slot (85, figures 3-4), being obliquely installed on the bottom surface of the motherboard.

Regarding claim 10, Rolls et al. disclose wherein the obliquely installed memory slot has a height smaller than that of the central processing unit (figures 3-4).

Regarding claim 11, Rolls et al. further disclose a motherboard case (72) installed on top of the top surface of the motherboard and beneath the cage (figures 3-4).

Regarding claim 12, Rolls et al. disclose the motherboard cage comprising at least a position aperture and at least a positioning device corresponding to the positioning aperture for plugging into the positioning aperture when the cage is mounted on the motherboard cage (figures 4, 9 and 10d).

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Regarding claims 13 and 18, as best understood, Rolls et al. disclose the motherboard cage having a plurality of holes/apertures (194, figures 10a-10d).

Regarding claims 14 and 16-17, Rolls et al. disclose the integrated electronic devices such as a hard disk drive (60), a CD-ROM drive (52) and a floppy disk drive being mounted in the cage (48) on the top surface of the motherboard (figure 4).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rolls et al. in view of Hileman et al. [US 5,963,424].

Regarding claims 5-6, Rolls et al. disclose the instant claimed invention except for a second heat ventilating device installed in the housing and adjacent to the top surface of the motherboard to dissipate heat.

Hileman et al. disclose a computer system (figure 1) having at least one fan (42) installed with a power supply to dissipate heat from the computer system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add at least one fan with ventilating device/power supply adjacent to the top surface of the motherboard of Rolls et al., as suggested by Hileman et al., for the purpose of providing dissipation heat of the computer system.

Regarding claim 7, Rolls et al., as modified, disclose at least one second ventilating hole (figures 9 and 10a-10d) installed on the housing and adjacent to the top surface of the motherboard (figures 3-4) to dissipate heat.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rolls et al. in view of Kim et al. [US 2003/0047606].

Regarding claim 15, Rolls et al. disclose the instant claimed invention except for the integrated electronic device being a card reader.

Kim et al. disclose a computer system (figures 1-2) having at least one integrated electronic device being a card reader (202).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a card reader to replace one of the integrated electronic devices of Rolls et al., for the purpose of reading/inputting data from a smart card/memory card and transmitting the data as electrical signals, optical signals to the computer system.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Pokharna [US 6,801,430] discloses an actuation membrane to reduce an ambient temperature of heat generating device;
- Sands et al. [US 6,246,576] disclose a computer mother board multi-position chassis drawer latch and release mechanism;

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- Unrein [US 6,597,569] discloses partitioned computer platform;
- Winick et al. [US 5,793,608] disclose a cooling system for enclosed electronic components; and
- Kikinis [US 6,094,351] discloses an universal enclosure for different type of motherboard.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/2/06

Hung Bui

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